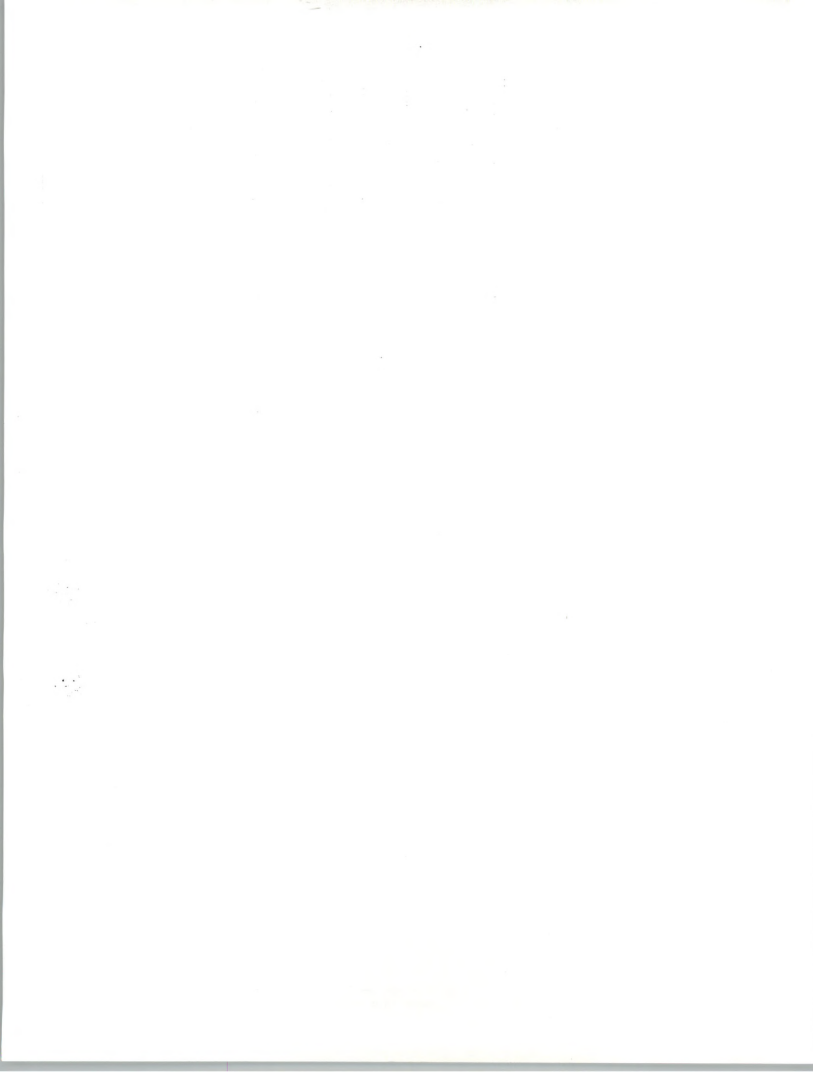


Information Services
Banking and Finance
in the 1990s

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Information Services

Banking and Finance in the 1990s

MAPRE-DW-1



Overview

- U.S. Information Services
Market Trends
- Overview—U.S. Market Sizes
and Growth
- Banking and Finance—Trends
and Issues

MAPRE-DW- 2a



Overview

- Impacts on the Information Systems Function
- Banking and Finance Information Services Markets
- Tandem in the Marketplace

MAPRE-DW- 2b

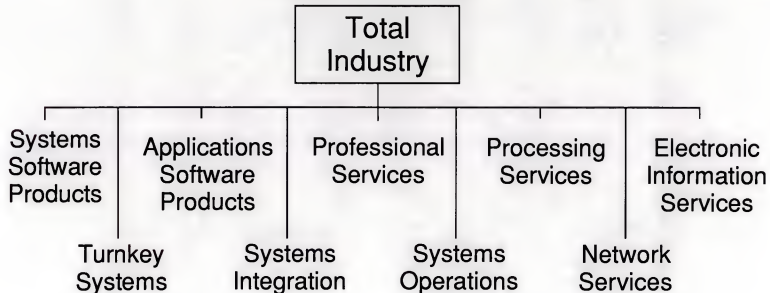


U.S. Information Services Market

MS-3



Information Services Industry Structure



IS-2



Key Trends for the 1990s

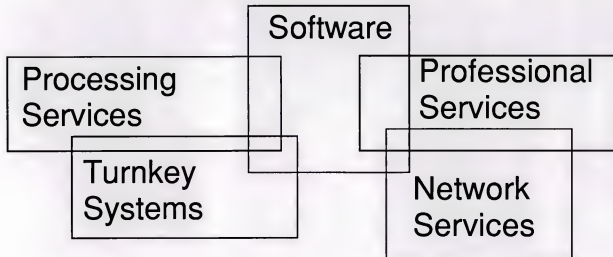
- Products & services markets blurring
- Changing market structure
- Internationalization
- Standards
- Vendor consolidation

IS-6



IS Market Structure—1980s

INPUT's View

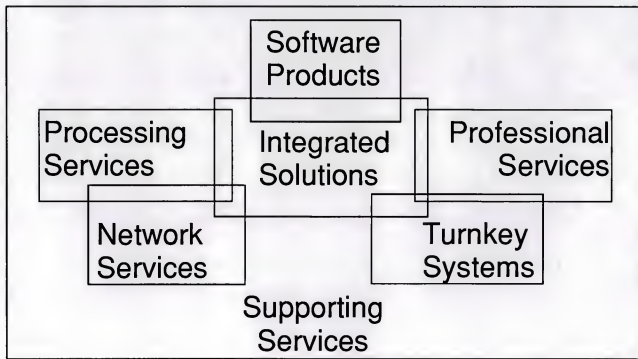


IS-10



Information Services Market Structure—1990s

Emphasis on Supporting Services



IS-11



Summing It Up

- Broadening product strategies
- Emphasis on “solution” niches
- Focus on quality and service

Accomplished through:

- Self-funded expansion
- Consolidation—partnering/acquisitions

INPUT

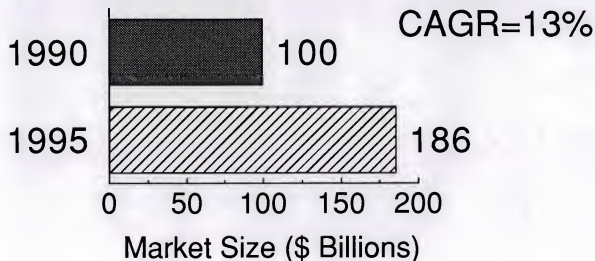


Market Forecasts

MF-1



U.S. Information Services Market, 1990-1995



MF-3

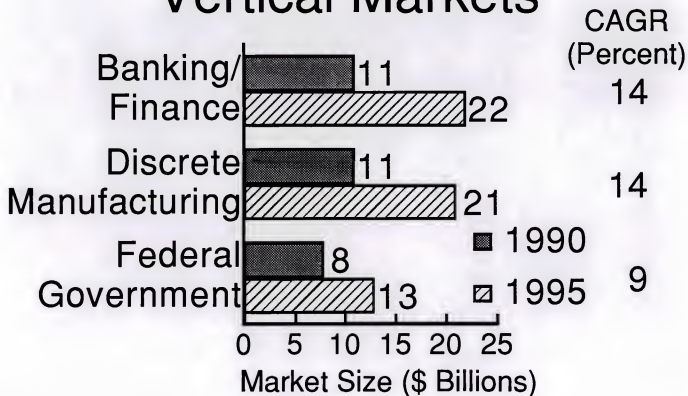


Vertical Markets

VM-1



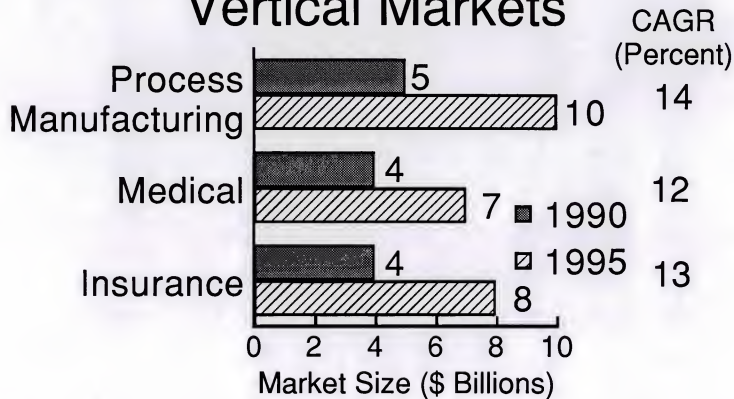
Largest Information Services Vertical Markets



VM-2



Largest Information Services Vertical Markets



VM-3



Banking and Finance

Issues and Opportunities

MAPRE-DW- 3



U.S. Banking and Finance Industry Demographics

Segment	No. of Institutions	Total Assets (\$ B)
Commercial banks	12,000	\$3,500
Savings and loan institutions	2,500	\$1,300

MAPRE-DW- 48



U.S. Banking and Finance Industry Demographics

Segment	No. of Institutions	Total Assets (\$ B)
Credit unions	14,000	\$175
Brokerages and other financial services firms	N/A	\$1,500

MAPRE-DW- 4b



Impacts of Business Trends

- Global financial services competition
- Third-world debt
- 1980s takeover/LBO-based junk bond debt

MAPRE-DW- 5a



Impacts of Business Trends

- 1990-1991 recession in the U.S.
- 1989-1991 “rolling recession” in real estate
- Europe 1992

MAPRE-DW- 5b



Key Topics Impacting the Banking and Finance Industry

- The S&L bailout
- Profitability
- Business restrictions and competition
- Overcapacity and mergers
- Cost cutting

MAPRE-DW- 6a



Key Topics Impacting the Banking and Finance Industry

- Outlook for regulatory reform
- The shifting credit card business
- Securitization
- Brokerages since the 1987 crash
- Nonbank financial services firms

MAPRE-DW- 6b



Information Technology Issues Banking and Finance Industry

- Established technologies
- Imaging
- Expert systems
- Downsizing and outsourcing
- Disaster recovery
- Communications

MAPRE-DW- 7a



Information Technology Issues Banking and Finance Industry

- Distributed systems and integrated data bases
- EDI
- Workstations
- Home/remote banking
- Debit cards and smart cards

MAPRE-DW- 76



Distributed Systems and Integrated Data Bases

- Minicomputers versus PC/mainframe cooperative processing
- RDBMSs
- Integrated customer information systems
- Executive information systems

MAPRE-DW- 8

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Banking and Finance Key Systems Opportunities

- Imaging
- Downsizing and outsourcing
- Disaster recovery
- Distributed and integrated systems
- Workstations
- New charge card technologies

MAPRE-DW- 9



Impacts on the Information Systems Function

MAPRE-DW- 10



Key Business Issues Impacting IS

- Companywide cost pressures
- Securing demonstrated benefits
- Downsizing and outsourcing
- Integrating systems from mergers
- Implementing “relationship” banking
- Evaluating new technologies

MAPRE-DW- 11



Banking and Finance Sector— IS Budgets, Averages

14% Hardware

2% Software (purchased)

2% External processing,
information, and professional
services



Banking and Finance Sector— IS Budgets, Averages

- 7% Communications
- 50% Salaries and benefits
- 25% Other, including nonsalary
overhead charges

MAPRE-DW- 12b



Objectives and Plans of IS Managers

- Cope with tight budgets and cost controls
- Evaluate and implement outsourcing as appropriate
- Implement disaster recovery
- Implement RDBMSs

MAPRE-DW- 13a

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Objectives and Plans of IS Managers

- Integrate merged-bank systems
- Support “relationship banking”
- Explore imaging
- Research (only) most other information technologies

MAPRE-DW- 13b



Banking and Finance Information Services Markets

MAPRE-DW- 14

Page 171

Page 171
continued from previous page

Banking and Finance Sector IS Driving Forces

- Cost/capital-use attractiveness:
Processing services and
systems operations
- Current price/performance of
minicomputer-based turnkey
systems

MAPRE-DW- 15a



Banking and Finance Sector IS Driving Forces

- RDBMS benefits
- Mergers among midsized banks
- Fast-changing regulatory/reporting requirements
- Nonbank financial services firms' strong competitive positions

MAPRE-DW- 15b

10-11

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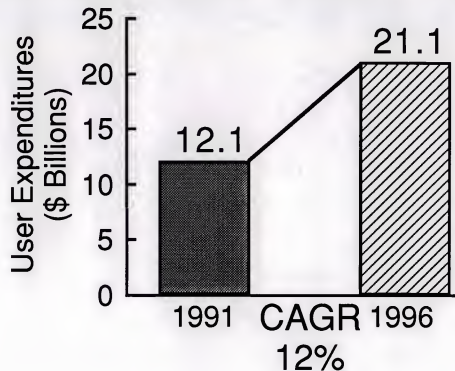
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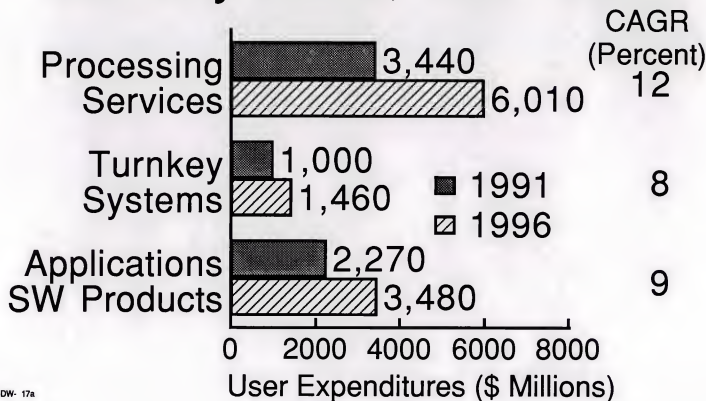
Banking and Finance Sector IS Market, 1991-1996



MAPRE-DW- 16



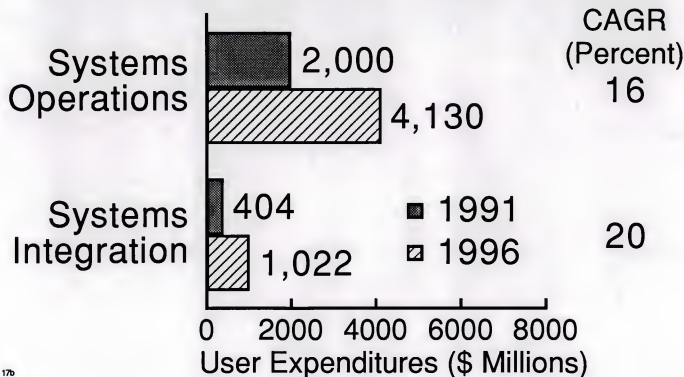
B & F Sector IS Market by Delivery Mode, 1991-1996



MAPRIE-DW- 17a



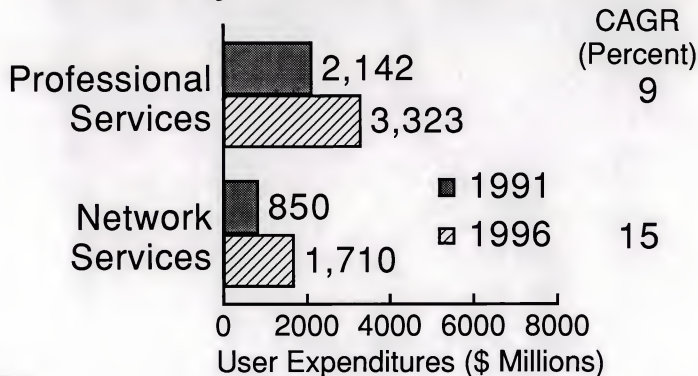
B & F Sector IS Market by Delivery Mode, 1991-1996



MAPRE-DW- 17b



B & F Sector IS Market by Delivery Mode, 1991-1996



MAPRE-DW- 176



Banking and Finance Sector Individual Segment Markets, 1991-1996

Industry Segment	1991		1996		1991-1996 CAGR
	\$ Millions	Total (Percent)	\$ Millions	Total (Percent)	
Commercial Banks	6,050	50	11,600	55	14
Savings Institutions	2,420	20	3,800	18	9
Credit Unions	1,815	15	2,750	13	9
Brokerages & Other Finl. Serv. Firms	1,815	15	2,950	14	10
Total	12,100	100	21,100	100	12

MAPRE-DW-18



Banking and Finance Sector Leading Information Services Vendors

	Market Share (Percent)	Proc. Svcs.	Turnkey Sys.	Appl. SW	Sys. Ops.	Sys. Int.	Prof. Svcs.	Network Svcs.
First Fin. Mgmt.	5	*						
ADP	3	*	*					*
CDC	2	*	*					*
Dow Jones	4							*
EDS	4	*			*	*	*	*
First Data Res.	2	*						
GEIS	2	*					*	*
IBM	3	*		*		*	*	*
TRW	2					*	*	*
Andersen	2					*	*	
Quotron	2							*
SIAC	2	*					*	
Systematics	2			*	*			
FISERV	2	*			*			
Reuters	3							*



Tandem in the Marketplace

MAPRE-DW- 20



About INPUT

INPUT provides planning information, analysis, and recommendations for the information technology industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

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